Solving Equations, Literally

A Practice Understanding Task

Solve each of the following equations for *x*:

1.
$$\frac{3x+2}{5} = 7$$

$$2. \qquad \frac{3x+2y}{5} = 7$$



3.
$$\frac{4x}{3} - 5 = 11$$

4.
$$\frac{4x}{3} - 5y = 11$$

5.
$$\frac{2}{5}(x+3) = 6$$

6.
$$\frac{2}{5}(x+y) = 6$$

7.
$$2(3x+4)=4x+12$$

8.
$$2(3x+4y) = 4x+12y$$

Write a verbal description for each step of the equation solving process used to solve the following equations for x. Your description should include statements about how you know what to do next. For example, you might write, "First I_______, because_______..."

$$9. \qquad \frac{ax+b}{c} - d = e$$

$$10. \qquad r \cdot \sqrt{\frac{mx}{n} + s} = t$$